

HANFORD SITE

Environmental Restoration Contract

Monthly Performance Report

June 2004

Accelerating Cleanup ...



Department of Energy
Richland Operations Office



Bechtel Hanford, Inc.
Environmental Restoration Contractor



CH2MHILL Hanford Inc.



**EBERLINE
SERVICES**
HANFORD, INC.

ENVIRONMENTAL RESTORATION EXECUTIVE SUMMARY

June 2004 Monthly Report

SAFETY:

As of June 30, the ERC worked approximately 629,017 hours since the last lost workday incident, which occurred on October 28, 2003. The ERC has experienced 89% injury free workdays during FY04. No significant issues or findings were identified with regard to the 12 applicable CPOF criteria during the June reporting period. Current calendar month: 2 first aids

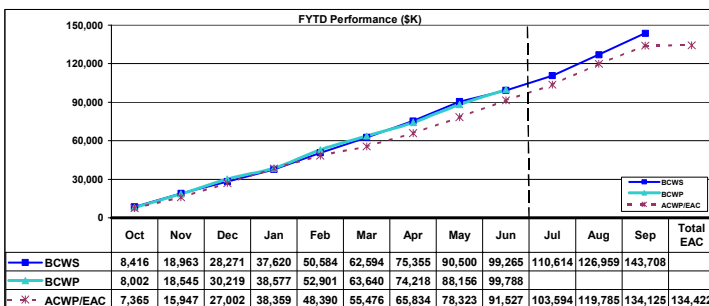
HIGHLIGHTS:

- Performed H Reactor gas wing explosive demolition as planned. Phase 2 demolition will be completed early August.
- Submitted Draft A 100-K Ancillary Facilities EE/CA to RL/regulators on June 7 for review.
- Awarded 300 Area East Side remediation contract.
- Began remediation at 116-N-1 Crib.
- Completed excavation, sorting, and stockpiling at 118-B-3 BG.
- Issued RFP for 100 B/C Remaining Pipelines and Sewers.
- Received and disposed of ten shipments of treated uranium chips-in-oil waste that was returned from Tennessee.
- Completed admix placement for ERDF Cells 5/6 expansion.
- Obtained RL concurrence of DOT on-site equivalency path forward.
- Submitted Draft A General Work Plan for 100/300 Area River Corridor Baseline Risk Assessment to RL for transmittal to regulators and stakeholder to begin 60-day review.
- Received RL approval of Columbia River Component Basis & Assumptions document.
- HQ conducted VPP assessment; team will recommend ERC be awarded "Merit" status, recognizing a strong safety program.

UPCOMING KEY ACTIVITIES:

- Complete D Reactor SSE - September.
- Perform haul road construction and overburden removal at 118-K-1.
- Complete design/procurement for receiving low-level fraction of waste from FH's TRU Retrieval Project.
- Receive final four shipments of treated uranium chips-in-oil waste for disposal in ERDF (M-16-03I).
- Begin ERDF Cells 5/6 crest pad building foundation installation.
- Complete 100 B/C Pilot Round 2 sampling.

PERFORMANCE:



- SV:** \$523K; 0.5%. K Area and B/C burial ground remediation ahead of schedule; offset by ERDF expansion delays due to inclement weather and earlier pugmill equipment failures.

- CV:** \$8,261K; 8.3%. 300 Area backfill/regrade subcontract award less than plan; favorable settlement for previous site subcontract litigation; prior-year rebill accounting adjustments.

EAC TRENDS:

Current Month: \$1,496K

FYTD: (\$9,286K)

- Labor reductions at N Area, 300 Area, Group 4; 300 Area backfill/regrade efficiencies; favorable settlement for previous site subcontract litigation; prior-year rebill accounting adjustments.

TPA MILESTONES:

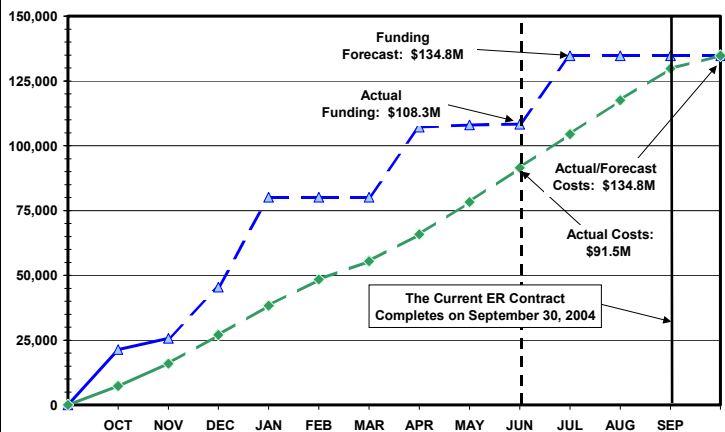
FY04 planned and completed TPA milestones:

- M-16-03H, Complete 300 Area regrade (due 6/30/04); **completed 2/19/04.**
- M-16-26E, Complete 100 B/C pipeline excavation (due 9/30/04); **completed 11/5/03.**
- M-93-11, Complete F Reactor ISS (due 9/30/04); **completed 1/15/04.**

Outyear TPA milestones forecast/completed in FY04:

- M-16-26F, Complete 100 B/C pipeline backfill (due 2/28/05); **completed 5/7/04.**
- M-16-03I, Complete 618-4 drum treatment (due TBD); **forecast 8/31/04.**
- M-93-17, Complete D Reactor ISS (due 12/31/04); **forecast 9/30/04.**

FUNDING:



PERFORMANCE INCENTIVES:

- SPI = 1.07 FYTD through June.
- Remove a Gold Chart radiological facility by 3/1/04. **Demolished above-grade portion of 1304-N Tank. Completed 4/2/04.** Tank base demolition will be accomplished (if required) along with 1300-N Basin demolition.
- Complete 10 Gold Chart release sites by 3/1/04. **Completed 2/23/04.**
- Complete 300-FF-1/618-5 Burial Ground regrade by 3/1/04. **Completed 2/19/04.**

ISSUES:

- QA, drawing approval, and other issues have potential to delay scheduled completion of D Reactor SSE installation.
- Lack of available resources and demand on ERDF operations has potential for delays in 105-H, 1304/1300-N D&D completion.
- Impact of 300 Area fuel to ERDF hazard categorization/authorization basis methodology.

ENVIRONMENTAL RESTORATION FACILITIES DECOMMISSIONING PROJECT

June 2004 Monthly Report

SAFETY:

- FYTD: 10 first aids; 3 recordable-only; 3 lost restricted; 0 lost workday; 0 skin contaminations
- Current Month: None

HIGHLIGHTS:

H Reactor:

- SSE contractor conducted an engineering walkdown on 6/21/04.
- Held work assessment to ensure all requirements and physical work activities were in place/completed prior to authorizing explosive gas wing demolition to proceed. Performed test blast on selected interior walls on 6/17. Production blasts were performed on 6/18-19, meeting all BHI expectations. Subcontractor will return early August for below-grade and outer rod room concrete structures demolition (Phase 2).

D Reactor:

- Essentially completed erection of SSE structural steel. Roofing/siding material installation is scheduled to begin second week of July.

1300-N Emergency Dump Basin (EDB):

- Completed removal of plastic and felt liners.
- Continued excavation of soil northwest of the EDB exposing pipes running to the Emergency Dump Tank (EDT).

190-DR Facility:

- Completed all work in "A" Bay basement.

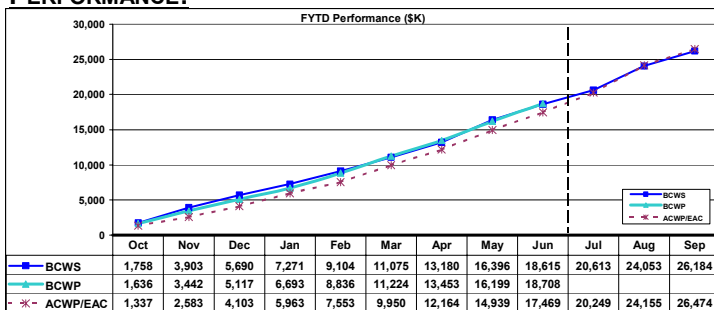
Other:

- Submitted Draft A 100-K Ancillary Facilities EE/CA to RL/regulators on June 7 for review.
- Incorporated comments to internal draft N Reactor EE/CA. Draft A scheduled to be submitted to RL/regulators by 7/2/04 for review.
- Distributed B Reactor EE/CA for internal review on 6/23/04; comments due by 7/2/04.
- Distributed 300 Area EE/CA (selected facilities in NW corner of 300 Area) for internal review on 6/29/04.

UPCOMING KEY ACTIVITIES:

- Finalize FY05/06 DWP - August.
- Complete explosive demolition (Phase 2) of H Reactor - August.
- Complete D Reactor SSE - September.
- Complete 190-DR asbestos removal activities - September.
- Complete 1300-N EDB - August.
- Complete 70% asbestos removal of 1802-N; balance to be removed in FY05.

PERFORMANCE:



- SV:** \$93K; 0.5%. D Reactor SSE ahead of schedule; offset by late start for H Reactor gas wing demolition (resources utilized for FSB demolition which was impacted by inclement weather).
- CV:** \$1,239K; 6.6%. Fewer resources required for 100 Area S&M. Less project support/oversight required for DR ancillary facilities D&D, F Reactor, and less miscellaneous sampling required; offset by H Reactor demolition utilizing more resources than planned.

EAC TRENDS:

Current Month: \$1,420K

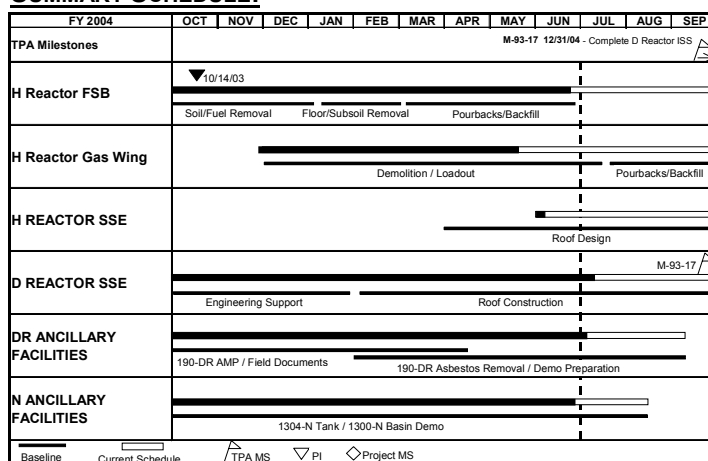
FYTD: \$290K

- H Reactor increase in explosive demolition Phase 2, and anticipated overtime in to-go schedule. Increase in equipment rentals.
- 117-DR demolition/loadout efficiencies.
- 190-DR asbestos removal less than anticipated.
- D Reactor increased due to authorized change orders.

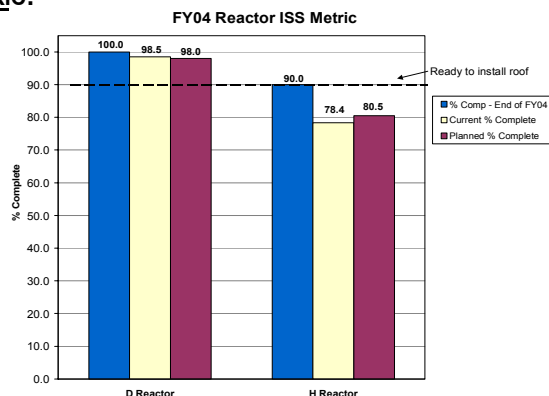
TPA MILESTONES:

- M-93-11, Complete F Reactor ISS (due 9/30/04); **completed 1/15/04, more than 8 months ahead of schedule.** (Physical ISS work completed in August; regulators approved S&M Plan on 1/15/04.)
- M-93-17, Complete D Reactor ISS (due 12/31/04); **forecast 9/30/04.**

SUMMARY SCHEDULE:



ISS METRIC:



PERFORMANCE INCENTIVES:

Remove a Gold Chart radiological facility by 3/1/04. Demolished above-grade portion of 1304-N Tank. **Completed 4/2/04.** Tank base demolition will be accomplished (if required) along with 1300-N Basin demolition.

ISSUES:

- QA, drawing approval, and other issues have potential to delay scheduled completion of 105-D SSE installation. BHI is monitoring resolution of these issues.
- Lack of available resources (equipment, drivers, trucks) and demand on ERDF operations (over what was in original DWP) has potential for delays in 105-H, 1304/1300-N D&D completion.

ENVIRONMENTAL RESTORATION REMEDIAL ACTION PROJECT

June 2004 Monthly Report

SAFETY:

FYTD: 3 first aids; 0 recordable; 0 lost workday cases
Current Month: None

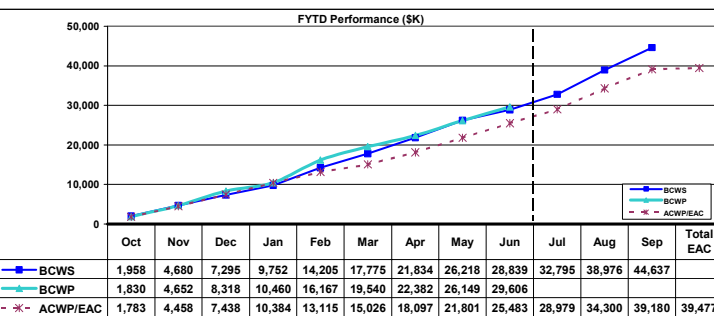
HIGHLIGHTS:

- Awarded the 300 Area East Side Remediation Contract.
- Completed final closeout of the 300 Area Regrading Contract.
- Completed readiness assessment and started remediation at 116-N-1.
- Continued excavation activities on the 116-K-2 Mile Long Trench and reactor effluent pipelines.
- Completed ERC and RL management briefings on the 618-7 Burial Ground Investigation. Completed 618-7 draft EPA and EAP.
- Completed geophysical investigation on 45 of 51, 100 D Area waste sites.
- Issued 7 Rev. 0 RSVPs; issued 4 Draft A RSVPs.
- Presented and obtained RL-ABD staff concurrence for 116-C-3 Chemical Tanks Investigation Strategy.
- Completed 100% of all activities associated with the B/C Effluent Pipelines project including re-installation of fence around B Reactor and re-paving of the remediated portions of B Avenue.
- Completed excavation, sorting, and stockpiling at 118-B-3.
- Erected 6-foot fence around 118-B-1 for HRA controls.
- Issued Request for Proposal for 100 B/C Remaining Pipelines and Sewers (RPAS).
- Six waste sites in the 100 Area OUs covering approximately 54 acres were "removed from the books" using existing data resulting in significant cost avoidance. This teaming effort was accomplished by RL, EPA, and Ecology using innovative, efficient, and cost-effective ways to address challenging waste sites.

UPCOMING KEY ACTIVITIES:

- Complete additional sampling for chromium at 100 D Area.
- Mobilize 300 Area East Side subcontractor.
- Award the 100 B/C RPAS subcontract.
- Perform 618-7 Burial Ground Investigation.
- Perform haul road construction and overburden removal at 118-K-1.

PERFORMANCE:



- SV:** \$767K; 2.7%. K Area pipeline, 116-K-2 Mile Long Trench and B/C BG remediation ahead of schedule; partially offset by schedule delays in submittals and remediation at 116-N-1 Crib.
- CV:** \$4,124K; 13.9%. 300 Area backfill/regrade subcontract award less than plan; N Area final contract closeout less than planned; favorable settlement for previous site subcontract litigation; labor underruns at 100 K and 100 N Areas.

EAC TRENDS:

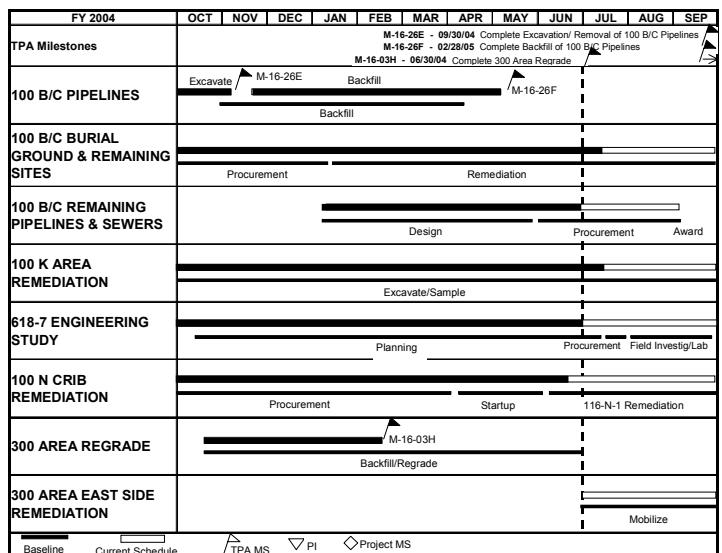
Current Month: (\$71K)
FYTD: (\$5,160K)

- Labor reductions at N Area, 300 Area, and Group 4; 300 Area backfill/regrade subcontract efficiencies; favorable settlement for previous site subcontract litigation; waste minimization efforts at B/C site 600-232.

TPA MILESTONES:

- M-16-03H, Complete 300-FF-1, 618-4, and 618-5 Burial Ground regrade (due 6/30/04); completed 2/19/04, more than 4 months ahead of schedule.
- M-16-26E, Complete excavation/removal of 100 B/C pipelines (due 9/30/04); completed 11/5/03, nearly 11 months ahead of schedule.
- M-16-26F, Complete backfill of 100 B/C pipelines (due 2/28/05); completed 5/7/04; more than 9 months ahead of schedule.

SUMMARY SCHEDULE:



PERFORMANCE INCENTIVES:

- Complete 10 Gold Chart release sites by 3/1/04. Completed on 2/23/04.
- Complete 300-FF-1/618-5 Burial Ground regrade by 3/1/04. Completed on 2/19/04.

ISSUES:

None for this reporting period.

ENVIRONMENTAL RESTORATION WASTE OPERATIONS PROJECT

June 2004 Monthly Report

SAFETY:

FYTD: 8 first aids; 1 lost restricted; 0 lost workday cases
Current Month: None

Occurrences:

- Worker forgot to wear lapel air sampler used for precautionary monitoring (RL-BHI-ERDF-2004-0006)
- Waste container rolled off transport truck in ERDF queue (RL-BHI-ERDF-2004-0007)

HIGHLIGHTS:

- Received 50,798 tons of waste at ERDF during June; 358,213 tons during FY04; 4,875,978 tons of contaminated material have been disposed in ERDF since operations began in July 1996.
- Suspended operations on nine separate days in June due to high winds.
- Problems with rail shipments of slag caused a shutdown of 183-H waste treatment on June 28. Received FH approval to ship slag via truck and EPA approval for using a leaner formula to treat precipitated crystals when operations resume.
- Received initial shipments of waste from remediation of the 116-N-1 Crib.
- Initiated review of the ERDF Authorization Basis relative to a proposal to treat/dispose of surplus uranium fuel from the 300 Area.
- Received and disposed of ten shipments of treated uranium chips-in-oil waste, returned from Tennessee.
- Admix production was completed on June 22, with 48,410 tons produced this month, bringing the total to 160,920 tons produced since project inception. (18,720 tons produced above the estimated design quantity of 142,200 tons.)
- Admix placement was completed on June 22, with 54,537 tons placed this month, bringing the total to 158,621 tons placed since project inception. (16,421 tons placed above the estimated design quantity of 142,200 tons.)
- Secondary geotextile material placement continued in Cell 6 and was completed on June 30. Secondary gravel placement in Cell 6 was also completed on June 30.
- Secondary liner system installation in Cell 5 began on June 25.
- Initiated review on a draft received for the non-TRU Waste Retrieval DQO. Also initiated review of a 90% draft of the non-TRU Retrieval RAWP. Anticipated completion date for both is July 6.
- Obtained RL concurrence of DOT on-site equivalency path forward on June 15.

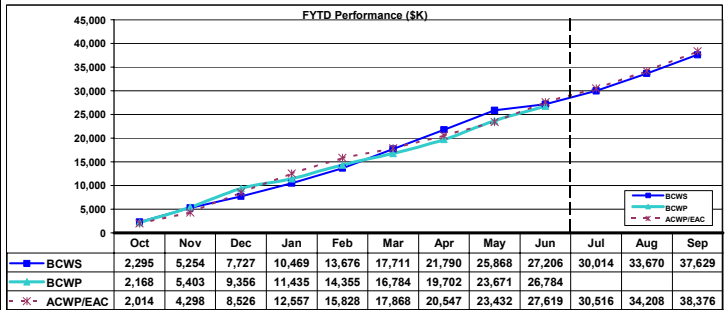
UPCOMING KEY ACTIVITIES:

- Obtain DOT equivalency and procure IP-2 roll-on/roll-off waste containers for shipping higher activity waste from 100-N Crib and for compliance with newly promulgated regulations that become effective in October.
- Receive final four shipments of treated uranium chips-in-oil waste for disposal in ERDF (M-16-031).
- Complete design/procurement for receiving low-level fraction of waste from FH's TRU Retrieval Project. Initiate waste receipts in late August.
- Begin primary liner and gravel system installation in Cell 6 in July. Secondary liner and gravel system installation in Cell 5 will continue. Both will complete in July.
- Begin crest pad building foundation installation in July.

TPA MILESTONES:

M-16-031, Complete treatment of drummed waste from 618-4 Burial Ground (due TBD); forecast 8/31/04.

PERFORMANCE:



- SV:** (\$422K); (1.6%). ERDF expansion behind schedule. Good recovery experienced last two months; schedule expected to be recovered by fiscal year-end.
- CV:** (\$835K); (3.1%). Increase in uranium chips-in-oil treatment costs. May under-accrual for admix placement corrected in current month.

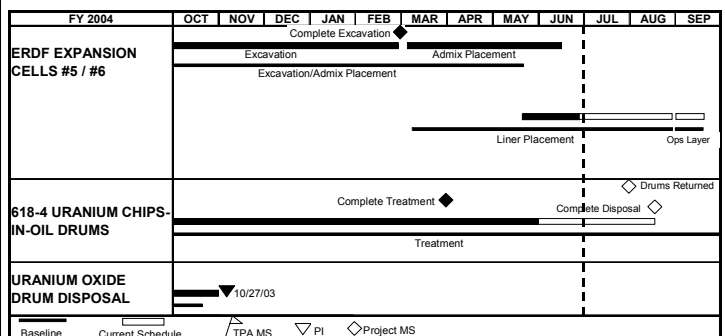
EAC TRENDS:

Current Month: \$204K

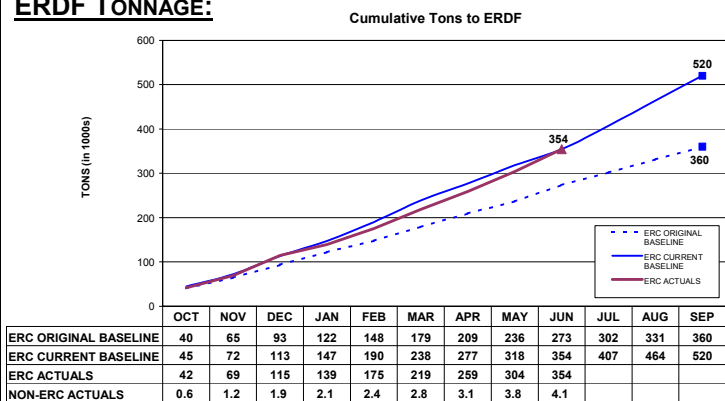
FYTD: \$746K

- Increased cost for treatment/disposal of uranium chips-in-oil.

SUMMARY SCHEDULE:



ERDF TONNAGE:



ISSUES:

Impact of 300 Area fuel to ERDF hazard categorization/ authorization basis methodology.

ENVIRONMENTAL RESTORATION RISK ASSESSMENT AND SITE CLOSURE PROJECT

June 2004 Monthly Report

SAFETY:

No first aid, recordable, or lost workday cases experienced FYTD.

HIGHLIGHTS:

100/300 Area:

- Submitted Draft A Work Plan to RL for transmittal to regulators and stakeholders to begin 60-Day TPA review; comments due August 20.
- Held kickoff meeting with RL/regulators on DQO process.

100 B/C Pilot:

- Incorporated comments from internal technical reviews and RL/regulators into two reports, *100 B/C Pilot Project Field Sampling Plan For 2004 Sampling* and *100 B/C Pilot Project Data Summary For 2003*. Reports will be issued to RL first week of July.
- Approved BCP for remaining Round 2 sampling.
- Provided a briefing to Nez Perce of what enters into a risk assessment, how calculations are done, and how results are interpreted.

Columbia River Component:

- RL approved Basis and Assumptions (B&A) document on June 4, one month ahead of schedule.

Closure Activities:

- Continued working with Projects on WIDS and site closure documentation requirements for 100-N facilities. Facilities that integrate with RA waste sites will be entered into WIDS for site closure documentation. WIDS requirements for other RAWP facilities being evaluated with Projects.
- Completed Orphan Sites' Task presentation at the UMM on 6/24/04 per RL request.

Other:

- Continued DWP development.
- Completed walkdown of bat caves to document bat activity at 100 D Area.
- Completed an archeological dig at 100 F Area. Recovered materials currently undergoing lab analysis; report due in September.

UPCOMING KEY ACTIVITIES:

100/300 Area:

- Prepare and distribute DQO briefing package for stakeholders.
- Conduct Issues Interviews with regulators, Tribes, and stakeholders in July.

100 B/C Pilot:

- Complete Round 2 sampling.
- Continue developing exposure scenarios for ecological receptors.
- Continue developing Tribal and other human health exposure scenarios.
- Begin drafting a Traditional Use Scenario with the Wanapum for completion by mid-September.

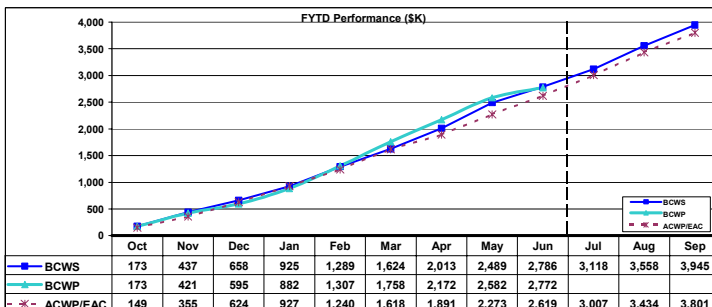
Columbia River Component:

- Develop Project Plan and Schedule.

Closure Activities:

- Prepare point-of-view presentation for WIDS/Site Closure documentation requirements for facilities.
- Issue DQA template/checklist for internal review/comment.
- Prepare draft flowchart for a CVP-RSVP site closure documentation process.
- Complete training and initiate field work (walkdowns) for Orphan Site's task.

PERFORMANCE:



- SV:** (\$14K); (0.5%). 100/300 Area Data Quality Objectives Preparation and Orphan Site Plan Implementation are slightly behind schedule as a result of resource limitations and equipment delivery delays, respectively. Both tasks are expected to have complete schedule recoveries.
- CV:** \$152K; 5.5%. Columbia River Component Objectives/Issues Definition and draft B&A document required fewer resources to complete than planned due to lessons learned from 100/300 Area.

EAC TRENDS:

Current Month: \$41K

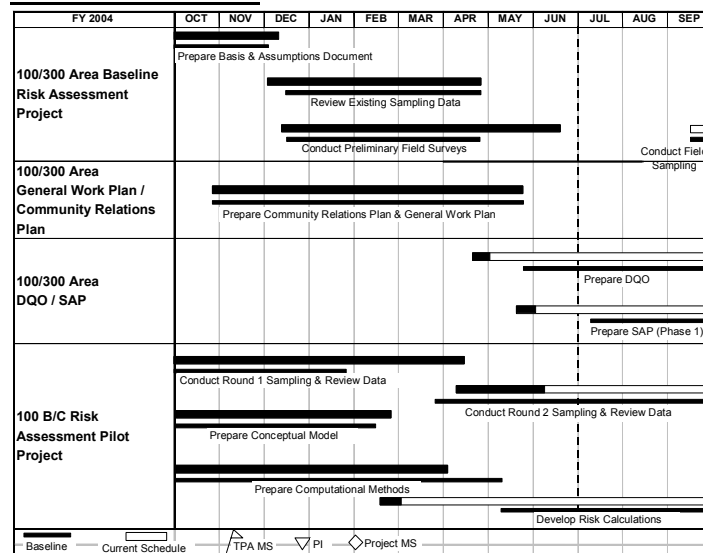
FYTD: (\$144K)

- Columbia River Component B&A document development less than planned.

TPA MILESTONES:

No FY04 milestones.

SUMMARY SCHEDULE:



ISSUES:

None for this reporting period.

ENVIRONMENTAL RESTORATION PROGRAM MANAGEMENT AND SUPPORT PROJECT

June 2004 Monthly Report

SAFETY:

FYTD: 5 first aids; 0 recordable-only; 1 lost workday case
Current month: 2 first aids (abrasions; paper cut)

HIGHLIGHTS:

Safety and Health:

- DOE-HQ Voluntary Protection Program (VPP) Assessment team conducted an on-site review of ERC's VPP process. The team will be recommending ERC be awarded "Merit" status in the VPP. Achieving VPP Merit status is a significant accomplishment and recognizes a strong safety program supported by employee commitment.
- The RMT approved the procurement of MGP electronic dosimeter calibration equipment. Significant long-term cost savings are expected.
- Industrial Hygiene and RadCon developed modifications to the survey method that substantially reduces the RCT's ergonomic stress.
- Implemented and mobilized the Task Safety Awareness and VPP programs for the 116-N-1 project.

Technical Services:

- Issued Land Disposal Restriction (LDR) storage assessment of the 100 Areas.
- Completed review of Hanford Site regulatory commitment documents.
- Completed the Emergency Planning and Community Right-to-Know Act Toxic Release Inventory Report Certification.
- Established draft-annotated outline for 300-FF-1 Operable Unit RA Report based on agreements with RL, BHI, and EPA.
- Completed collection of 365 samples, 4 sample and analysis forms, 15 draft sample disposition records, and 1 validation package.
- Completed audit of Severn Trent Laboratory, Richland.
- Developed work process flow for RSVP and site closure documentation for ERC review.
- Prepared two technology proposals for DOE-HQ: 1) field method to determine if soil meets LDR limits, and 2) methods for non-destructive characterization and intact removal of waste silos from 100 Area Burial Grounds.

UPCOMING KEY ACTIVITIES:

Safety and Health:

- ERC's goal is to attain VPP "Star" status. As soon as DOE-HQ issues the initial report, necessary actions will be completed and the verification team invited to reassess the program.

Technical Services:

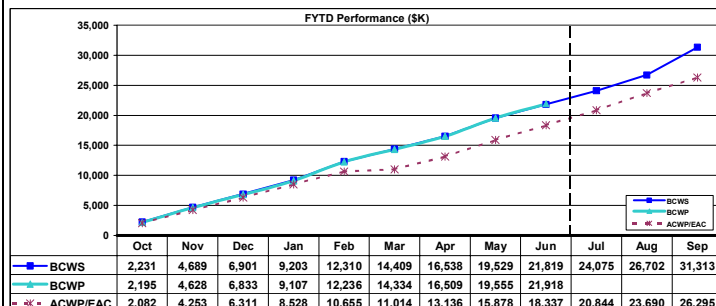
- Site-wide Air Operating Permit Annual Compliance Certification Report due to regulators in July.
- Annual ERC Criticality Safety Assessment Report due to RL in August.
- Final site-wide Institutional Controls Assessment Report due to regulators in September.

ASSESSMENTS:

FY 2004 ERC Assessment Data												
Assessments	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Scheduled	14	15	16	19	22	26	29	24	29	18	25	25
Scheduled / Performed	11	12	13	16	15	19	21	22	23			
Past Due Completed	0	0	0	0	4	1	3	2	1			
Unscheduled / Performed	5	4	4	10	5	2	5	7	2			
Total Performed	16	16	17	26	24	22	29	31	26			

No significant findings during this reporting period.

PERFORMANCE:



- **SV:** \$99K; 0.5%. N/A

- **CV:** \$3,581K; 16.3%

Technical Services:

- Underrun in Regulatory Support, Design Engineering, Technology Applications, and Sample and Data Management due to more direct project support.
- **QA&S:**
 - Lost full-time manager and 3 staff, which have not been replaced. Temporary personnel are being used to reduce impacts. Assessment scope has been reduced requiring fewer hours to perform each assessment.
- **Other:**
 - Prior-year rebill accounting adjustments were realized in March.

EAC TRENDS:

Current Month: (\$99K)

FYTD: (\$5,018K)

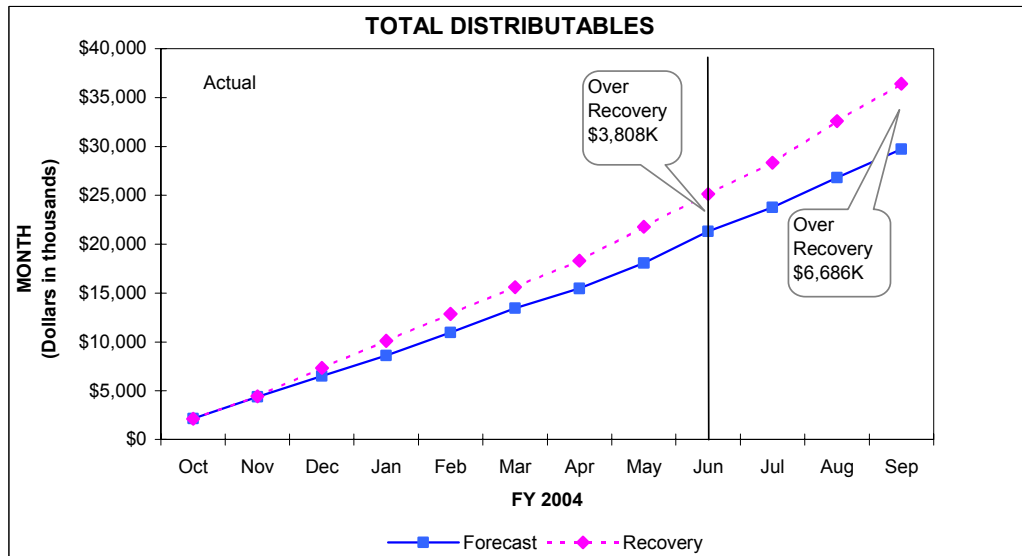
- Prior-year rebill adjustments and FY04 fee forecast reduction.
- Staffing reductions; staff charging more direct project support.

ISSUES:

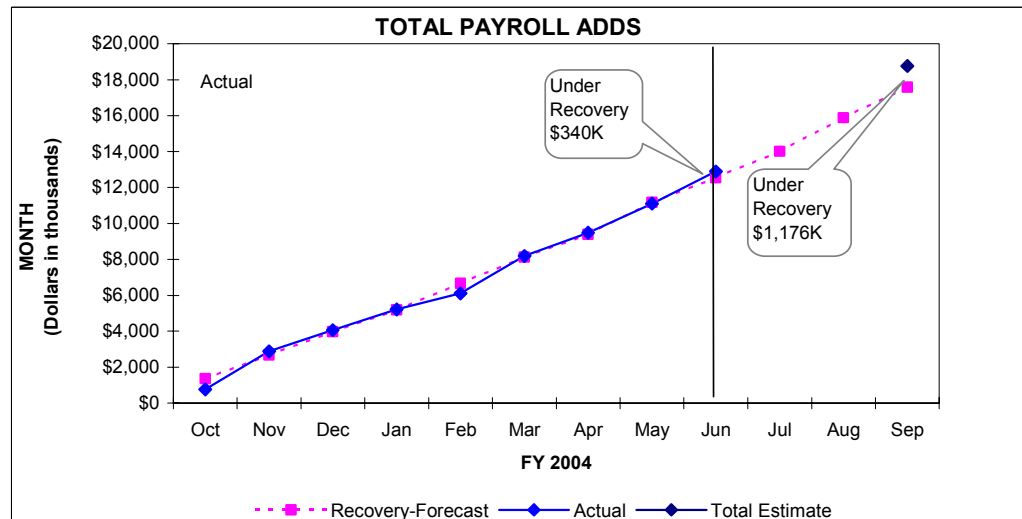
None for this reporting period.

ENVIRONMENTAL RESTORATION RECOVERY OF DISTRIBUTABLE COST

June 2004 Monthly Report



	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
	Act	Act	Act	Act	Act	Act	Act	Fcst	Fcst	Fcst	Fcst	Fcst	
Budget	2,289	2,801	2,242	2,533	2,906	2,680	2,625	3,143	2,605	2,534	3,173	2,999	32,530
Forecast	2,132	2,235	2,143	2,078	2,356	2,495	2,027	2,608	3,240	2,448	3,053	2,909	29,723
Recovery	2,113	2,310	2,908	2,765	2,750	2,751	2,710	3,449	3,366	3,201	4,277	3,810	36,409
Over/Under Recovery													
Monthly	-20	75	765	688	394	256	683	841	126	753	1,224	902	6,686
Cum	-20	55	820	1,508	1,902	2,158	2,841	3,682	3,808	4,561	5,785	6,686	



	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
Recovery-Budget	1,410	1,790	1,437	1,448	1,878	1,637	1,616	2,035	1,461	1,598	2,085	1,874	20,271
Recovery-Forecast	1,347	1,329	1,298	1,204	1,476	1,467	1,264	1,767	1,392	1,462	1,867	1,702	17,574
Actual	761	2,117	1,187	1,148	892	2,079	1,295	1,624	1,781				18,750
Over/Under Recovery													
Monthly	586	-788	111	56	584	-612	-32	143	-389				
Cum	586	-202	-90	-34	550	-62	-94	49	-340				-1,176

